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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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PPG INDUSTRIES INC
INTELLECTUAL PROPERTY DEPT
ONE PPG PLACE
PITTSBURGH, PA 15272

EXAMINER	
VETERE, ROBERT A	

ART UNIT	PAPER NUMBER
1792	

MAIL DATE	DELIVERY MODE
11/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/686,246	DATTILO, VINCENT P.	
	Examiner	Art Unit	
	Robert Vetere	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 12 September 2007.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 and 14-22 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) 1-12, 14-22 is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a)☐ All b)☐ Some * c)☐ None of:
1.☐ Certified copies of the priority documents have been received.
2.☐ Certified copies of the priority documents have been received in Application No. _____.
3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Examiner's Comments

An amendment which amends claims 7, 11, 12, 14, 18, and 19, cancels claim 13 and adds claims 21 and 22 was received and entered into the record on 9/12/2007. That amendment has been considered in this action

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 7-12 and 14-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant claims "a dynamic coating system comprising a plurality of coating sources; a mixer *directly* connected to the plurality of coating sources; a plurality of reservoirs *directly* connected to the mixer; and one or more applicators *directly* connected to one or more of the reservoirs." Applicant's specification, however, does not teach this. For example, the specification describes pumps (128a-e, 150a-f) between the coating components and the mixer and a valve (268) between the mixer and the reservoirs.

2. Claims 7-12 and 14-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims "a dynamic coating system comprising a plurality of coating sources; a mixer *directly* connected to the plurality of coating sources; a plurality of reservoirs *directly* connected to the mixer; and one or more applicators *directly* connected to one or more of the reservoirs." In applicant's remarks, on p. 10, applicant defines "directly" to mean that there are no intervening components between

the connected components. As detailed above, this is incongruent with applicant's specification. This discrepancy between applicant's disclosure and the claim language used renders these claims indefinite.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuoka et al. (US 6,238,746, hereinafter '746) in light of Takeuchi (JP 61-171527, hereinafter '527).

Claims 1 and 4: '746 teaches a method of coating a substrate comprising:

providing a coating source including a plurality of waterborne color components which are free of effect pigments and a dynamic mixing system (Col. 2, lines 28-45; Col. 5, lines 1-16);

dynamically blending selected color components to form a plurality of coating materials of selected color (Col. 2, lines 28-45); and

selectively directing a coating material over at least a portion of the substrate (Col. 2, lines 46-55).

What '746 does not teach is that, once blended, the coating materials are directed to separate reservoirs. '527, however, teaches a method of dynamically blending paint components through mixers (4, 4', 4") and directing these coating materials to separate reservoirs (7, 7', 7") in order to prevent sedimentation of pigments in the system (Abst.). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have directed the coating materials to separate reservoirs, as taught by '527, in the method taught by '746 in order to have eliminated the sedimentation of pigments in the system. Also, because both '746 and '527 teach methods of mixing color components in order to paint a substrate, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the teachings of '746 into the method of '527 with the reasonable expectation of successfully mixing color components to produce a paint which can be used to coat a substrate.

Claim 5: '746 does not teach the use of effect pigments.

3. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over '746 in light of '527, as discussed above, and further in light of Hetland et al. (WO 89/06181, hereinafter '181).

Claims 2-3: '746 teaches all the limitations of claim 1 in light of '527, as discussed above. What it does not teach is that the substrate is positioned on a rotatable turntable. '181 teaches a method of painting an automobile wherein the automobile is positioned on a pivotable platform ("PL," Fig. 1; p. 3) in order to bring the automobile to an appropriate position relative to the paint-applying apparatus (p. 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the turntable of '181 in the method of '746 in order to position the substrate relative to the paint-applying apparatus.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over '746 in light of '527, as discussed above, and further in light of Jaffe et al. (US 5,871,827, hereinafter '827).

Claim 6: '746 teaches all the limitations of claim in light of '527 to paint an automobile, as discussed above. What it does not teach is that the coating source further includes a plurality of coating components comprising effect pigments. '827 teaches a method of painting an automobile wherein the coating comprises polychromatic effect pigments (Col. 4, lines 1-14). '827 also teaches that effect pigments are highly desirable for automotive finishes (Col. 1, lines 18-27). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included effect pigments, as taught by '827, in the method taught by '527 because of the high desirability of such pigments in automotive finishes.

5. Claims 7, 9, 11-12, 18-19 and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over '827 in light of Retamal et al. (US 6,494,608, hereinafter '608) and '527 and further in light of Fujisawa (US 4,738,219, hereinafter '219).

Claims 7, 9, 11-12, 18-19 and 21: '827 teaches a method of applying a composite basecoat to a substrate, comprising:

applying a first basecoat layer (which is free of effect pigment) over the substrate using a non-dynamic coating system (Col. 4, lines 1-13); and applying a second basecoat layer over the substrate (Col. 4, lines 1-13).

What it does not teach is that the second basecoat layer is applied by a dynamic coating system. '608 teaches a method of producing paints for the painting of car bodies (Col. 1, lines 9-12) wherein the plurality of coating components are selectively directed through the use of on-off valves (23a, 23b, 23c, etc.) and are dynamically mixed (Col. 3, lines 60-68) in order to produce paints of the desired color with great flexibility (Col. 4, lines 14-26). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have dynamically applied the second basecoat in '827 as taught by '608 in order to have produced any color of paint from a small set of coating components.

'827 and '608 also do not teach that the dynamic coating system comprises a mixer directly connected to the plurality of coating components and that a plurality of reservoirs are connected to the mixer and that one or more applicators are connected to the reservoirs. '219, however, teaches a method of coating, using a coating apparatus which has a plurality of coating components (1-3 in Fig. 1), connected directly to a mixer (18) which is connected to an applicator (19) (See, also, Col. 3: 31-40).

What '219 does not teach, however, is that there are a plurality of reservoirs directly connected to the mixer and one or more applicators. As discussed above, '527 teaches a method of dynamically blending paint components through mixers (4, 4', 4") and selectively directing these coating materials to separate reservoirs (7, 7', 7") through the use of valves (10) in order to prevent sedimentation of pigments in the system (Abst.). The paint in these reservoirs is then selectively directed to one of two painting machines (15) through one of the branched paths (13, 13'). With respect to limitation (f) in claim 21, '527 teaches that the process of directing components to the mixer and from the mixer to the reservoirs is a continuous process and, therefore, is repeated.

Because '827, '608, '219 and '527 all teach methods of applying a coating of blending coating components onto a substrate, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the system taught by '219 and '527 in the method of '827 and '608 with the predictable expectation of successfully applying a coating over a substrate.

With respect to claim 12, while '827 and '608 are silent as to the presence of a second dynamic mixing system, the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (MPEP § 2144.04).

Claim 22: '827 teaches all the limitations of claim 21 in light of '608, '219 and '527, as discussed above. '827 also teaches that the second basecoat comprises effect pigment (Col. 4, lines 4-8).

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over '827 in light of '608, '219 and '527 as discussed above, and further in light of Rockrath et al. (US 5,981,080, hereinafter '080), with reference to '827.

Claim 8: '827 teaches all the limitations of claim 7 in light of '608, '219 and '527, as discussed above. What it does not teach is that the first basecoat comprises effect pigment. '080 teaches a method of applying a multi-coat paint process wherein the first basecoat comprises effect pigment (Col. 1, lines 26-39). As stated above in paragraph 4, effect pigments are highly desirable in automotive finishes. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included effect pigments in the first basecoat of the method of '827 as taught by '080 because effect pigments are highly desirable in automotive finishes.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over '827 in light of '608, '219 and '527, as discussed above, and further in light of Nakazono et al (US Patent 5,647,535, hereinafter '535).

Claim 10: '827 teaches all the limitations of claim 7 in light of '608, '219 and '527, as discussed above. What it does not teach is that the non-dynamic coating system includes at least on bell applicator or at least one gun applicator. '535 teaches a method of applying a metallic paint to a substrate using a bell applicator (Col. 3, lines 14-20) because the use of a bell applicator improves painting efficiency (Col. 3, lines 14-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used a bell applicator, as taught by '535, in the method of '827 in order to improve painting efficiency.

8. Claims 14-15, 17, 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over '827 in light of '608, '219 and '527 and further in light of Dutt et al. (US 2004/0028823, hereinafter '823).

Claims 14-15 and 20: As discussed in paragraph 5, above, '827 teaches all the limitations of claims 14 and 18 in light of '608, '219 and '527 except that it does not teach that the first and second basecoats are different colors. '823 teaches a method of applying a multi-coat paint onto a vehicle where the second basecoat is a different color than the first basecoat in order to achieve a different color effect (¶ 0039). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the second basecoat a different color than the first basecoat, as taught by '823, in the method of '827 in order to have achieved a different color effect.

Claims 17 and 22: '827 teaches all the limitations of claim 14 in light of '608, as discussed above. '827 also teaches that the second basecoat comprises effect pigment (Col. 4, lines 4-8).

9. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over '827 in light of '608, '219 and '527, as applied to claim 14 above, and further in light of '080 for the same reasons applied to claim 8, above.

Response to Arguments

Applicant's arguments filed 9/12/07 have been fully considered but they are not persuasive. Applicant first argues that Fukuoka and Takeuchi should not be combined because the combination would render the Takeuchi invention unsuitable for its intended purpose. However, the intended purpose of Takeuchi is to provide a coating on a substrate and, therefore, is not rendered unsuitable by this combination.

Applicant further argues that the combination of Jaffe and Fukuoka is inappropriate because the combination would render the Fukuoka invention unsuitable for its intended purpose. This is not persuasive. Jaffe is cited as evidence of a typical coating composition known in the art and the combination of Jaffe and Fukuoka does not render Fukuoka unsuitable for its intended purpose of painting vehicle bodies.

Applicant further argues that the combination of Takeuchi with Jaffe and Retamal is inappropriate with respect to claim 13. However, since applicant has cancelled claim 13, this argument is considered moot. However, with respect to claim 7, as amended, this argument is unpersuasive. Applicant argues that one of ordinary skill in the art would find it unnecessary to incorporate the reservoirs of Takeuchi into the combination of Jaffe and Retamal because the mixer of Retamal already prevents sedimentation. However, "[i]t is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." *In re Kerkhoven*, 850, 205 USPQ 1069, 1072 (CCPA 1980). Thus, the combination of Takeuchi with Jaffe and Retamal is appropriate.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Vetere whose telephone number is 571-270-1864. The examiner can normally be reached on Mon-Fri 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Robert Vetere

MICHAEL CLEVELAND
SUPERVISORY PATENT EXAMINER